

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



November 16, 2007

**TEST LABORATORY INFORMATION FOR
LARGE STORAGE WATER HEATERS**

To: Testing Laboratories that Test Large Storage Water Heaters
Manufacturers of Large Storage Water Heaters

Re: Annual Test Laboratory Application Process

Approval of Test Laboratories

Section 1603(a) of the Appliance Efficiency Regulations requires that large storage water heaters be tested at a laboratory that the Executive Director of the Commission determines:

- (1) has conducted tests using the applicable test method within the previous 12 months;
- (2) agrees to and does interpret and apply the applicable test methods set forth in Section 1604 of the *Appliance Efficiency Regulations* precisely as written;
- (3) has, and keeps properly calibrated and maintained, all equipment, material, and facilities necessary to apply the applicable test method precisely as written;
- (4) agrees to and does maintain copies of all test reports, and provides any such report to the Executive Director on request, for all basic models that are still in commercial production; and
- (5) agrees to and does allow the Executive Director to witness any test of such an appliance on request, up to once per calendar year for each basic model.

Applying for Approval

If you would like the Executive Director to determine that your laboratory meets the criteria in Section 1603(a)(1)-(5), and to approve your laboratory for such testing through December 31, 2008, please complete the enclosed application.

The application may be filled out on-line or printed out and completed off-line. In either case, sign and scan the signed application and all appropriate documents and attach them to an e-mail addressed to: appliances@energy.state.ca.us. If you choose this form of submittal, please indicate "2008 LS Water Heater Lab App Company Name" in the subject line, where Company Name is YOUR COMPANY NAME. Alternately, you may return the original signed application to the address shown below. We cannot accept FAXed applications because we must have an original signature. Be sure to include your signed application with all appropriate items attached and send to:

Appliance Efficiency Program
2008 LS Water Heater Lab App - Company Name
California Energy Commission
1516 Ninth Street, MS-25
Sacramento, CA 95814-5512

Test Methods

The water heater test methods set forth in Section 1604(f)(2) are as follows:

Large Water Heaters. The test method for large water heaters is: for booster water heaters ANSI/ASTM F2022-00, and for all others ANSI Z21.10.3-1998, modified as follows:

- (A) When testing an electric storage-type water heater for standby loss using Section 2.10 of ANSI Z21.10.3-1998:
 - 1. the electrical supply voltage shall be maintained within ± 1 percent of the center of the voltage range specified on the water heater nameplate; and
 - 2. when needed for calculations, the thermal efficiency (E_t) shall be 98 percent
- (B) When testing an oil water heater using Sections 2.9 and 2.10 of ANSI Z21.10.3-1998:
 - 1. vertical length of flue pipe, of sufficient height to establish the minimum draft specified in the manufacturer's installation instructions, shall be connected to the flue gas outlet;

2. all measurements of oil consumption shall be taken by instruments with an accuracy of ± 1 percent or better; and
3. the burner rate shall be adjusted to achieve an hourly Btu input rate within ± 2 percent of the manufacturer's specified input rate, with the CO₂ reading as specified by the manufacturer, with smoke no greater than 1, and the fuel pump pressure within ± 1 percent of the manufacturer's specification.

Dual-Fuel Models. Water heaters intended for use either with natural gas or LPG may be tested with natural gas and the results applied to both fuel types. [Section 1604(f)(3)]

Provision of Test Report

Section 1606(a)(3)(C) requires manufacturers of large storage water heaters to submit test reports upon which the manufacturer relies in filing certification information.

Marking

Section 1607(b) requires that the manufacturer's name or brand name or trademark, model number, and date of manufacture, indicating (i) year and (ii) month or smaller (e.g. week) increment, be permanently, legibly, and conspicuously displayed on an accessible place on each unit.

Submittal of Information (Certification) by Manufacturers

The submittal and approval of a laboratory application does NOT affect the manufacturers' listings of appliance models in our database. Manufacturers of models accurately listed in the database, do not need to resubmit any information. However, if information about those models has changed, or if you have manufactured new models that are not yet in the database, you must submit new certification data.

Manufacturers wishing to verify the status of currently listed models may review their listing at the following link: www.energy.ca.gov/appliances/appliance/excel_based_files/.

If your model listing is not current, or you need additional certifications forms and instructions, they can be found at :
<http://www.energy.ca.gov/appliances/forms/>.

A copy of the Energy Commission's *Appliance Efficiency Regulations* can be found at:
<http://www.energy.ca.gov/appliances/2007regulations/>.

The attached laboratory application attached may also be obtained at:
<http://www.energy.ca.gov/appliances/forms/>.

The Energy Commission is aware of statements in marketing literature stating or implying Commission approval of products or services. The Energy Commission does not endorse, favor, or recommend any particular product or service. Moreover, California law states that "It is unlawful for any person, firm, corporation, or association that is a nongovernmental entity to . . . solicit the purchase of or payment for a product or service . . . by means of a mailing, electronic message, or Internet Web site that contains a seal, insignia, trade or brand name, or any other term or symbol that reasonably could be interpreted or construed as implying any state or local government connection, approval, or endorsement," with exceptions not relevant here. (California Business & Professions Code section 17533.6.)

If you receive more than one copy of this letter (or similar letters), you are on multiple appliance mailing lists. It is not necessary to apply for the same test method more than once per calendar year. However, you must indicate all appliances that you wish to test with that test method at the time of your original application. If you have any questions you may contact appliance program staff at the address above or by email at: appliances@energy.state.ca.us.

Sincerely,

ELAINE HUSSEY
Appliance Efficiency Program

Enclosures

PLEASE DO NOT INCLUDE A COPY OF THIS LETTER WITH YOUR APPLICATION

California Appliance Efficiency Program
2008 Test Laboratory Application for
Large Storage Water Heaters

Note: You must include a Completed Sample Test Report with this application.

NOTE: This is a PDF fillable form. You may complete it on line or print it out and complete it off line. After it has been signed, you may scan it and return as an email attachment, addressed to appliances@energy.state.ca.us, or return it via mail to:

Appliance Efficiency Program
2008 LS Water Heater Lab App - Company Name
California Energy Commission
1516 Ninth Street, MS-25
Sacramento, CA 95814-5512

PLEASE ALSO NOTE THAT:

- Applications that have been re-typed in your own format **WILL NOT** be accepted.
- It is not necessary, and may delay processing of your application, to submit both an email and a mailed application
- Please allow at least four weeks during the heavy renewal period (November-March) before contacting us regarding your application.

Contact Person: _____

Company Name: _____

Address: _____

City: _____

State: _____ Zip: _____ Country: _____

Phone Number: Area Code (_____) _____

Fax: Area Code (_____) _____

email address: _____

WEB-site: _____

Appliance Type **LARGE STORAGE WATER HEATERS**

Test Method(s) Used: _____

**NOTE: Each test method must be listed in
Section 1604 of the *Appliance Efficiency Regulations*.**

_____ states:
Name of Laboratory _____

Initial all appropriate
Paragraphs

_____ I hereby apply for approval of the laboratory stated above for testing large storage water heaters for compliance with the California *Appliance Efficiency Regulations*.

_____ During the period for which approval is granted, our laboratory agrees to comply with all of the provisions (listed below), Sections 1604(f), and 1605.3(f), of Title 20 of the California Code of Regulations:

_____ has conducted tests using the applicable test method within the previous 12 months;

_____ *agrees to and does interpret and apply the applicable test method set forth in Section 1604 precisely as written;*

_____ *has, and keeps properly calibrated and maintained, all equipment, material, and facilities necessary to apply the applicable test method precisely as written;*

_____ *agrees to and does maintain copies of all test reports, and provides any such report to the Executive Director on request, for all basic models that are still in commercial production; and*

_____ *agrees to and does allow the Executive Director to witness any test of such an appliance on request, up to once per calendar year for each basic model.*

_____ Test reports issued to clients shall include statements of compliance or non-compliance of the minimum performance provisions shown in Section 1605.3(f) and the marking provisions in Section 1607(b).

_____ I have attached to this application an example of a completed sample test report for a large storage water heater tested by this laboratory within 12 months prior to the date of this application, to demonstrate what and how information is provided.

I declare under penalty of perjury of the laws of the State of California, that:

All the information in this statement is true, complete, accurate, and in compliance with all applicable provisions of Sections 1601 – 1608 of Title 20 of the California Code of Regulations; and

I am authorized to make this declaration, and to file this application, on behalf of

Name of Laboratory

Signature: _____ Date _____

Typed Name and Title _____

SPACE BELOW THIS LINE FOR CALIFORNIA ENERGY COMMISSION USE ONLY

The laboratory identified above is hereby approved for testing Large Storage Water Heaters in compliance with the Requirements of the Appliance Efficiency Regulation from the date shown below until December 31, 2008.

Date

BETTY CHRISMAN
Appliance Efficiency Program Manager
For the Executive Director

Check when completed:

Approved _____ listed _____ scanned _____

Notified/copy sent (date) _____

Denied/notified (date) _____